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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,414	12/21/2001	Patrick Bradd	920584-906029	5733

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EXAMINER

NG, CHRISTINE Y

ART UNIT	PAPER NUMBER
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2616

NOTIFICATION DATE	DELIVERY MODE
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11/27/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent-ch@btlaw.com

Office Action Summary

Application No.

10/032,414

Applicant(s)

BRADD ET AL.

Examiner

Christine Ng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9, 10 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☒ Claim(s) 6, 7, 9, 10 and 13-19 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9 line 16: The "address translator" should be changed to --the first address translator--.

In claim 16: It is unclear whether or not claim 16 has ended since there is no period. Furthermore, in claim 17 (which is similar to claim 16) there are more limitations in lines 14-17 that are not included in claim 16.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6, 7, 9, 10 and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,731,642 to Borella et al in view of U.S. Patent No. 7,085,267 to Carey et al.

Referring to claim 6, Borella et al disclose a first call server (Figure 1, first telephony interface 22) in a first packet-switched network (Figure 1, network 14) comprising:

A terminal controller (Figure 1, in first telephony interface 22) arranged to receive a call set-up request (Figure 4, setup message 80) from an originating terminal (Figure 1, caller 24) in the first packet-switched network, wherein the first call server is responsive to the call set-up request to set up a VoIP call from the originating terminal in the first packet-switched network having a first address range to a destination terminal (Figure 1, callee 26) in a second packet-switched network (Figure 1, network 16) having a second address range, the terminal controller arranged to further provide the originating terminal with a first range address of an address translator (Figure 1, first router 18 and first gatekeeper 30) as its destination address for the call, the first range address being in the first address range. Networks 14 and 16 each have a separate and independent address space. First router 18 has a pool of available proxy private addresses to identify devices on edge network 14. Also, setup message 80 includes the private first router address as its destination address. Refer to Column 3, line 65 to Column 4, line 32; Column 4, lines 52-67; Column 5, lines 8-12; and Column 8, lines 5-8.

An address translator controller (Figure 1, in first router 18) arranged to provide to the address translator an address (caller address) of the originating terminal in the first network as derived from the call set-up request received by the terminal controller.

The setup message 80 includes the private caller address as its source address. Refer to Column 8, lines 5-8.

However, Borella et al do not disclose that the method is used in a system wherein the first address range overlaps with the second address range.

Carey et al disclose in Figure 3 a communication system between customer A's network 310, customer B's network 320, and service provider's network 370. Customer networks 310 and 320 are attached to NAT device 330, and the server provider network 370 is attached to NAT device 360. The IP addresses of customer A's network 310 may overlap with the IP address in the service provider's network 370. A Comprehensive NAT 340 is used to avoid the overlap of IP addresses. Refer to Column 5, line 56 to Column 6, line 7; and Column 6, lines 47-53. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the method is used in a system wherein the first address range overlaps with the second address range. One would have been motivated to do so in order to provide a method of dealing with overlapping address ranges, thereby facilitating communication and preventing erroneous transmissions. Although Borella et al disclose in Figure 1 that networks 12, 14 and 16 each have separate and independent addresses spaces (Column 4, lines 15-16), overlapping address ranges is a problem in systems with many networks communicating.

Referring to claim 7, Borella et al disclose that the first call server includes intra-server communication means arranged to communication with a second call server (Figure 1, second telephony interface 28) to obtain an IP address and port for the

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destination terminal which is under the control of the second call server and wherein the address translator controller is further arranged to provide the IP address and port of the destination terminal to the address translator. Networks 12, 14 and 16 each have a separate and independent IP address space so all devices connected on the network will be identified by an IP address. Also, ports are used for communication at the source and destination. Refer to Column 4, lines 15-27 and lines 66-67.

Referring to claim 9, Borella et al disclose a first address translator (Figure 1, first router 18 and first gatekeeper 30) in a first network (Figure 1, network 14) comprising:

A terminal port (Figure 1, in first router 18) for communicating with a first terminal (Figure 1, caller 24) in the first network, wherein the first network has a first address range, and the first network further has a first call server (Figure 1, first telephony interface 22), and wherein the first address translator has a first range address in the first address range. Networks 14 and 16 each have a separate and independent address space. First router 18 has a pool of available proxy private addresses to identify devices on edge network 14. Refer to Column 3, line 65 to Column 4, line 32; Column 4, lines 52-67; and Column 5, lines 8-12.

A translator port (Figure 1, in first router 18) for communicating with a second address translator (Figure 1, second router 20 and second gatekeeper 32) in a second network (Figure 1, network 16) having a second range address in a second address range. Networks 14 and 16 each have a separate and independent address space. Second router 18 has a pool of available proxy private addresses to identify devices on

edge network 16. Refer to Column 3, line 65 to Column 4, line 32; Column 4, lines 52-67; and Column 5, lines 8-12.

A control port (Figure 1, in first router 18) for communicating with the first call server, the first call server being adapted to provide the first terminal with the first range address of the first address translator as its destination address for the call. The setup message 80 includes the private first router address as its destination address. Refer to Column 8, lines 5-8.

Wherein when the first address translator receives a message at the first range address from the first terminal, the address translator routes the message to the second address translator. In Figure 4, messages 80-114 are used to connect caller 24 and callee 26, which utilizes the first router and the second router. Refer to Column 5, lines 8-12; and Column 7, line 63 to Column 9, line 12.

Borella et al do not disclose that the method is used in a system wherein the first address range overlaps with the second address range. Refer to the Carey et al rejection part of claim 6.

Referring to claim 10, Borella et al disclose in Figure 1 that the first address translator includes a controller (first gatekeeper 30) that is arranged to receive at the control port, information relating to an IP address of the second address translator which is reachable via the translator port and corresponding information relating to an IP address of the first terminal and to pass data received at the terminal port from the first terminal to the first address translator via the translator port. Networks 12, 14 and 16

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each have separate and different IP address spaces. All devices connected to networks 12, 14 and 16 are identified by IP address. Refer to Column 4, lines 15-32.

Referring to claim 13, Borella et al disclose in Figure 1 a first packet-switched network (network 14) having a first address range, a call server (first telephony interface 22) communicatively coupled to the first address range, a terminal (caller 24) having an address in the first address range and a first address translator (first router 18 and first gatekeeper 30) having a first range address in the first address range, the call server being arranged to provide the terminal with the first range address of the first address translator as its destination address for a call (setup message 80 includes the private first router address as its destination address; Column 8, lines 5-8), to control the first address translator and to generate a mapping (Column 9, lines 40-44) in the first address translator between the address of the terminal in the said first packet-switched network and a second range address of a second network address translator (second router 20 and second gatekeeper 32) in a second packet-switched network (network 16) having a second address range, the first address translator being arranged to communicate with the second address translator to allow communication with a second terminal (caller 26) in the second network, the call server further being arranged to negotiate a port (ports are used for communication at the source and destination; Column 4, lines 24-27 and lines 66-67) at the address of the first terminal for subsequent communication once a call is set-up. Networks 14 and 16 each have a separate and independent address space. First router 18 has a pool of available proxy private address to identify devices on edge network 14, and second router 20 has a

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pool of available proxy private addresses to identify devices on edge network 16.

Furthermore, the mapping (Column 9, lines 40-44) in the first router 18 between the caller 24 and the second router 20/second gatekeeper 32 is done when the first router 18 translates the proxy public callee address to the proxy private callee address and the proxy public caller address to the proxy private caller address. This is a result of Figure 4, steps 80-102 that were used to connect caller 24 and callee 26, which also used first router 18/first gatekeeper 30 and second router 20/second gatekeeper 32. Refer to Column 3, line 65 to Column 4, line 32; Column 5, lines 8-12; and Column 7, line 63 to Column 10, line 12.

Borella et al do not disclose that the method is used in a system wherein the first address range overlaps with the second address range. Refer to the Carey et al rejection part of claim 6.

Referring to claims 14 and 15, Borella et al disclose a method of setting up a call between a first packet-switched network (Figure 1, network 14) and a second packet-switched network (Figure 1, network 16), the networks having first and second address ranges respectively. Networks 14 and 16 each have a separate and independent address space. Refer to Column 3, line 65 to Column 4, line 32. The method comprises:

Receiving a call setup request (Figure 3, setup message 80) from a first terminal (Figure 1, caller 24) in the first network, the call being destined for a second terminal (Figure 1, callee 26) in the second network. Refer to Column 7, line 67 to Column 8, line 8.

Negotiating a port at the address of the first terminal for subsequent communication once the call is set-up. Ports are used for communication at the source and destination. Refer to Column 4, lines 24-27 and lines 66-67.

Providing the first terminal in the first network with a first range address of a first address translator (Figure 1, first router 18 and first gateway 30) in the first network for use as the first terminal's destination address, the first range address being in the first address range. First router 18 has a pool of available proxy private addresses to identify devices on edge network 14. Also, the setup message 80 includes the private first router address as its destination address. Refer to Column 4, lines 52-67; Column 5, lines 8-12; and Column 8, lines 5-8.

Notifying (Figure 4, setup message 80) the first address translator of an address (callee station number) to which data received from the first terminal in the first network should be passed, the address being for a second address translator (Figure 1, second router 20 and second gateway 32) having a second range address in the second address range and being situated in the second network, the second address translator being adapted to pass data received at the second range address to the second terminal. In Figure 4, messages 80-114 are used to connect caller 24 and callee 26. The process begins when first telephony interface sends to first router a setup message 80 that includes the callee station number. After steps 82-96, second router 20 receives the callee number. Also, second router 20 has a pool of available proxy private addresses to identify devices on edge network 16. Refer to Column 5, lines 8-12; and Column 7, line 63 to Column 9, line 12.

Whereby two-way communication is established (Figure 3, connect messages 110-114) between the first and second terminals via the first and second address translators. Refer to Column 9, lines 13-18.

Borella et al do not disclose that the method is used in a system wherein the first address range overlaps with the second address range. Refer to the Carey et al rejection part of claim 6

Referring to claims 16 and 17, Borella et al disclose a first address translator (Figure 1, first router 18 and first gatekeeper 30) in a first network (Figure 1, network 14) that carries out the steps of:

Receiving notification (Figure 3, setup message 80) from a call server (Figure 1, first telephony interface 22) of the address (caller address) of a first terminal (Figure 1, caller 24) in the first network which will be sending data, the first network having a first address range, the call server being communicatively coupled to the first address range and the first address translator having a first range address in the first address range. Networks 14 and 16 each have a separate and independent address space. First router 18 has a pool of available proxy private addresses to identify devices on edge network 14. Also, the setup message 80 from first telephony interface 22 includes private caller address as its source address. Refer to Column 3, line 65 to Column 4, line 32; Column 5, lines 8-12; and Column 8, lines 5-8.

Receiving notification (Figure 3, lookup response 86) of an address of a second address translator (Figure 1, second router 20 and second gatekeeper 32) in the second packet-switched network, to which data should be sent by the first address

translator when received from the first terminal in the first network, the second network having a second address range and the address of the second address translator being a second range address in the second address range. Networks 14 and 16 each have a separate and independent address space. Second router 20 has a pool of available proxy private addresses to identify devices on edge network 16. Furthermore, lookup response 86 includes the public second gatekeeper address that is used by the first router and first gatekeeper to send data to the destination. Refer to Column 3, line 65 to Column 4, line 32; Column 5, lines 8-12; and Column 8, lines 16-45.

Receiving data from the first terminal in the first network and forwarding the data to the address of the second address translator, the second address translator being adapted to pass communication sent by the first terminal and received from the first address translator to a second terminal in the second network having an address in the second address range. Second router 20 has a pool of available proxy private addresses to identify devices on edge network 16. In Figure 4, messages 80-114 are used to connect caller 24 and callee 26, which utilizes the first router and the second router. Refer to Column 5, lines 8-12; and Column 7, line 63 to Column 9, line 12.

Borella et al do not disclose that the method is used in a system wherein the first address range overlaps with the second address range. Refer to the Carey et al rejection part of claim 6.

Referring to claim 18, Borella et al discloses wherein the first call server arranges for the originating terminal to view a first virtual gateway (Figure 1, first gatekeeper 30) in the address translator as a destination for the originating terminal, wherein the first

virtual gateway has the first range address. First router 18 has a pool of available proxy private addresses to identify devices on edge network 14, including first gatekeeper 30. Also, the setup message 80 includes the private first router address as its destination address. The first router then sends a setup message 82 to first gatekeeper. Therefore, the originating terminal and first telephony interface do not know about setup message 82. Refer to Column 4, lines 52-67; Column 5, lines 8-12; and Column 8, lines 5-15.

Referring to claim 19, Borella et al disclose that the first call server, which communicates with a second call server (Figure 1, second telephony interface 28) in the second packet-switched network, causes the second call server to assign a destination address of a second virtual gateway (Figure 1, second gatekeeper 32) in the address translator as a destination of the destination terminal. As shown in Figure 3, messages 92-104 are transmitted between second gatekeeper and second telephony interface/destination terminal. Also, second router 20 has a pool of available proxy private addresses to identify devices on edge network 16, including second gatekeeper 32. Refer to Column 5, lines 8-12; and Column 8, line 46 to Column 9, line 24.

Allowable Subject Matter

5. Claims 1-5 are allowed.
6. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

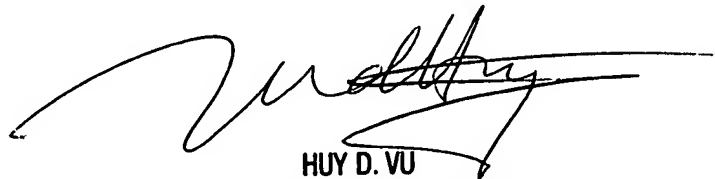
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. Ng

November 15, 2007



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SUPERVISORY PATENT EXAMINER
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